

**Windows®. Life without Walls™.**  
**Fujitsu recommends Windows 7.**

# DATA SHEET

## FUJITSU ESPRIMO E9900 0-WATT DESKTOP PC

### THE INNOVATIVE 0-WATT PC

#### ESPRIMO E9900 0-WATT

As a 0-Watt PC, the ESPRIMO E9900, equipped with innovative technology from Fujitsu and Intel®, is a power-saving miracle meeting all business and space requirements. With a volume of less than 13 litres it can be positioned vertically or horizontally - ideal for every desk. Made of specially selected material and, in addition to the 0-Watt function, equipped with further power-save options, such as a switched monitor outlet and power management, the ESPRIMO small form factor PC already meets today the legal requirements of tomorrow. Furthermore, this desktop PC, equipped with a power supply with up to 89% efficiency, meets ENERGY STAR® 5.0 certification requirements. Don't make any compromises!



#### 0-WATT PC

Cost savings by completely reducing off-mode losses

- Patented function for 0-Watt power consumption in off and hibernating mode with simultaneous management in a time slot that can be optionally set

#### ENVIRONMENTALLY CONSCIOUS PRODUCT WITH ENERGY STAR 5.0 CERTIFICATION

Your contribution to environmental protection for the continued existence of our planet

- Halogen-free mainboard, sophisticated product concept for the entire lifecycle



#### HIGHEST ENERGY EFFICIENCY COUPLED WITH INTELLIGENT PERFORMANCE

The best-in-class regarding power consumption combined with new levels of performance

- State-of-the-art Intel® Core™ processors with Turbo Boost and hyperthreading technology and a power supply with up to 89% efficiency

#### SYSTEM MANAGEMENT

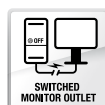
Easy system administration for complex IT infrastructure

- Intel® vPro™ technology

#### SILENT OPERATION

Pleasant working environment due to an extremely quiet system

- Innovative hardware design, optimized fan concept



# COMPONENTS

## PROCESSOR

Intel® Core™ i7-870 processor (4 Cores / 8 Threads, 2.93 GHz, 8 MB)
Intel® Core™ i7-860 processor (4 Cores / 8 Threads, 2.80 GHz, 8 MB)
Intel® Core™ i5-760 processor (4 Cores / 4 Threads, 2.80 GHz, 8 MB)
Intel® Core™ i5-750 processor (4 Cores / 4 Threads, 2.66 GHz, 8 MB)
Intel® Core™ i5-680 processor (2 Cores / 4 Threads, 3.6 GHz, 4 MB, Intel® HD Graphics)
Intel® Core™ i5-660 processor (2 Cores / 4 Threads, 3.33 GHz, 4 MB, Intel® HD Graphics)
Intel® Core™ i5-650 processor (2 Cores / 4 Threads, 3.20 GHz, 4 MB, Intel® HD Graphics)
Intel® Core™ i3-550 processor (2 Cores / 4 Threads, 3.20 GHz, 4 MB, Intel® HD Graphics)
Intel® Core™ i3-540 processor (2 Cores / 4 Threads, 3.06 GHz, 4 MB, Intel® HD Graphics)
Intel® Pentium® processor G6950 (2 Cores / 2 Threads, 2.80 GHz, 3 MB, Intel® HD Graphics)

## OPERATING SYSTEM

<b>Operating system optional preinstalled</b>	Genuine Windows® 7 Home Basic (EM) 32-bit Genuine Windows® 7 Home Premium 64-bit Genuine Windows® 7 Professional 32-bit Genuine Windows® 7 Professional 64-bit
<b>Operating system compatible</b>	openSUSE Linux Genuine Windows Vista® Genuine Windows® XP
<b>Operating system notes</b>	Dependent on configuration Windows 7® versions are: Microsoft Office 2007 ready Microsoft Office 2010 preloaded. Purchase a Product Key to activate a full Microsoft Office 2010 suite. Limited Windows XP support. Microsoft discontinued Windows XP certification on system level.

## MEMORY MODULES

2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM
4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM

## HARD DISK DRIVES (INTERNAL)

SSD SATA, 128 GB, 2.5-inch
SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T. business critical
SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 320 GB, 3.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 250 GB, 3.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 160 GB, 2.5-inch, S.M.A.R.T.

## Hard disk notes

Supporting NCQ and 3 GBit

## GRAPHICS ADD ON CARDS (OPTIONAL)

DP to DVI-D (single link) Adapter Cable
NVIDIA® GeForce® 9300GE display port low profile, 512 MB
NVIDIA® GeForce® 9500GS low profile, 512 MB
NVIDIA® Quadro® NVS 290 low profile, 256 MB

## DRIVES (OPTIONAL)

Blu-ray Disc™ Triple Writer
DVD-ROM
DVD Super Multi
MultiCard Reader 20in1, 3.5-Inch

## INTERFACE ADD ON CARDS/COMPONENTS (OPTIONAL)

WLAN III, 802.11g/Draft-n (Windows only)
Parallel Interface
Modem adapter kit (EU)
Modem 56k incl. RJ11 modem cable
Gigabit Ethernet PCIe x1
FireWire PCI-Card IEEE1394
eSATA Interface
Dual serial card PCI LP

Base unit	ESPRIMO E9900 0-Watt
<b>MAINBOARD</b>	
Mainboard type	D2924
Formfactor	proprietary
Chipset	Intel® Q57
Processor socket	LGA 1156
Processor quantity maximum	1
Memory slots	4 DIMM (DDR3)
Supported capacity RAM (max.)	16 GB
Memory frequency	1333 MHz
Memory notes	Dual channel support. For dual channel performance, 2 memory modules have to be ordered. Capacity per channel has to be the same.
LAN	10/100/1000 MBit/s Intel® 82578 DM
BIOS version	Phoenix 6.0
BIOS features	BIOS Flash EPROM update by software Recovery BIOS
Audio codec	Realtek ALC663
Audio features	Internal speaker supports audio playback, High Definition audio
<b>I/O CONTROLLER ON BOARD</b>	
Serial ATA total	4
thereof eSATA	2 (optional)
Controller functions	Serial ATA II NCQ and 3 GBit AHCI Raid 1/0
<b>INTERFACES</b>	
Audio: line-in	1
Audio: line-out	1
Front audio: microphone	1
Front audio: headphone	1
USB 2.0 total	12
USB front	2
USB rear	6
USB internal	4
VGA	1 (via DVI to VGA adapter; included for onboard graphics only)
DisplayPort	1 (for onboard graphics only)
DVI	1 (for onboard graphics only)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Parallel	1 (optional) (25pin with EPP and ECP)
Interface Module notes	Anytime USB charge functionality
<b>INPUT DEVICE / COMPONENTS</b>	
	Optical USB tilt wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse
<b>DRIVE BAYS</b>	
Drive bays total	3
3.5-inch internal bays	1
3.5-inch external bays	1
5.25-inch external bays	1
Drive bay notes	optional external bay as internal 3,5"
<b>SLOTS</b>	
PCI-Express 2.0 x16	1 x (210 mm) low profile

**SLOTS**

<b>PCI-Express x4 (mech x16)</b>	1 x (210 mm) low profile
<b>PCI (32-bit / 33 MHz)</b>	2 x (190 mm) low profile
<b>Slots optional configuration</b>	or 1x PCI Express x16 low profile (190mm) and via Riser 2 x PCI full height (174 / 210 mm)

**GRAPHICS ON BOARD**

<b>Graphics brand name</b>	Intel® HD Graphics (integrated in dual-core processors only)
<b>Shared video memory</b>	up to 1759 MB
<b>Refresh rate 1024 x 768 (recommended / max.)</b>	85 Hz / -
<b>Refresh rate 1280 x 1024 (recommended / max.)</b>	85 Hz / -
<b>Refresh rate 1600 x 1200 (recommended / max.)</b>	85 Hz / -
<b>TFT resolution (VGA)</b>	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
<b>TFT resolution (DVI)</b>	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
<b>TFT resolution (DisplayPort)</b>	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel 2560 x 1440 pixel 2560 x 1600 pixel
<b>Graphics features</b>	Dual display support DirectX 10.1 HDCP support OpenGL® 2.0
<b>Graphics notes</b>	Graphics controller integrated in dual-core processors. For quad-core processors graphics card is mandatory. Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size and operating system Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz

**ELECTRICAL VALUES**

<b>Power efficiency note</b>	power supply efficiency (at 230V; 20% / 50% / 100% load) : 86% / 89% / 87% 0-Watt mode automatically
<b>Rated voltage range</b>	100 - 240 V
<b>Rated frequency range</b>	50 - 60 Hz
<b>Operating voltage range</b>	90 - 264 V
<b>Operating line frequency range</b>	47 - 63 Hz
<b>Max. output of single power supply</b>	250 W
<b>Power factor correction/active power</b>	active
<b>Monitor outlet</b>	Switched

**POWER CONSUMPTION**

<b>Power consumption note</b>	See white paper Energy Consumption 0-Watt mode automatically
<b>Link to Energy White Paper</b>	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=73db6c1e-bf45-47be-9563-8f7633c0767f">http://docs.ts.fujitsu.com/dl.aspx?id=73db6c1e-bf45-47be-9563-8f7633c0767f</a>

**HEAT DISSIPATION**

<b>Heat dissipation notes</b>	See white paper Energy Consumption
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**NOISE FOR STANDARD CONFIGURATION (HDD, ODD, FDD)**

<b>Noise emission</b>	According to ISO9296
<b>Related Processors for noise</b>	Intel® Core™ i5-670 ; Intel® Core™ i7-860 including NVIDIA® GeForce® 9500GS
<b>Noise Operation mode 1: ODD load (Blue angel requirement)</b>	4.7 B / 32 dB(A) ; 4.5 B / 30 dB(A)
<b>Noise Operation mode 2: HDD load (Blue angel requirement)</b>	3.6 B / 20 dB(A) ; 3.4 B / 18 dB(A)
<b>Noise Operation mode 3: CPU 90% load (Blue angel requirement)</b>	3.5 B / 19 dB(A) ; 4.1 B / 27 dB(A)
<b>Noise Operation mode 4: High load</b>	3.6 B / 20 dB(A) ; 4.1 B / 26 dB(A)
<b>Noise Operation mode 5: Office applications</b>	3.6 B / 20 dB(A) ; 3.7 B / 21 dB(A)
<b>Idle mode (Blue Angel requirement)</b>	3.5 B / 19 dB(A) ; 3.4 B / 17 dB(A)
<b>Noise notes / description</b>	A weighted sound power level L <sub>wad</sub> (in B) / workplace related A-weighted sound pressure level L <sub>pAm</sub> (in dB(A)), Bystander position

**DIMENSIONS / WEIGHT / ENVIRONMENTAL**

<b>Dimensions (W x D x H)</b>	340 x 380 x 100 mm
<b>Operating position</b>	Vertical / horizontal (no feet needed)
<b>Weight</b>	approx. 10 kg
<b>Weight notes</b>	Actual weight may vary depending on configuration
<b>Operating ambient temperature</b>	10 - 35°C

**COMPLIANCE**

<b>Product</b>	ESPRIMO E9900
<b>Model</b>	DT7-2924
<b>Germany</b>	Blauer Engel / Blue Angel in progress GS optional
<b>Europe</b>	CE Nordic Swan
<b>USA/Canada</b>	FCC Class B cCSAus
<b>Global</b>	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 EPEAT® Silver
<b>Compliance link</b>	<a href="https://sp.ts.fujitsu.com/sites/certificates/default.aspx">https://sp.ts.fujitsu.com/sites/certificates/default.aspx</a>

**ADDITIONAL SOFTWARE**

<b>Additional software (preinstalled)</b>	Nero Essentials S (burning software)
<b>Additional software (optional)</b>	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink Power2Go BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive / Blu-ray playback is not supported under Windows XP if the system runs on Intel onboard graphics) Nero 9 Essentials XL

**MISCELLANEOUS**

	Thermal management Keyboard on (Special Fujitsu keyboard required) Extended lifetime
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**COMPATIBILITY (REFERENCES)**

	DMI 2.0 PC 2001 WMI 1.5 USB 2.0 SMBIOS
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**MANAGEABILITY**

<b>Manageability features</b>	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) iAMT 6.0
<b>Manageability type</b>	DeskView 10.x client management including:
<b>DeskView features</b>	On/Offline remote client management Detailed system inventory management and reports BIOS Management Remote power management System notifications Advanced alerts (ASF implementation) Security Remote Control DeskView Helpdesk Integration WoL (Wake on LAN)
<b>Manageability link</b>	<a href="http://ts.fujitsu.com/manageability">http://ts.fujitsu.com/manageability</a> <a href="http://www.altiris.com/fujitsu">http://www.altiris.com/fujitsu</a>

**SECURITY**

<b>Physical security</b>	Kensington Lock support Eye for padlock Optional: Integrated cabinet lock
<b>System security</b>	Boot sector virus protection Write protect option for the Flash EPROM Embedded security (TPM 1.2) Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces
<b>User security</b>	User and supervisor BIOS password SystemLock 2 BIOS SmartCard Security Hard disk password Optional: Access protection via external SmartCard reader Optional: Access protection via internal SmartCard reader

**SERVICEABILITY**

	FlexySlot EasyFix EasyChange for HDD EasyChange for optical drives
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**PACKAGING INFORMATION**

<b>Packaging dimension</b>	500x290x540 mm
<b>Max. quantity / pallet</b>	24
<b>Material - Weight (g) Carton</b>	1270 g
<b>Material - Weight (g) EPS / PS</b>	230 g
<b>Material - Weight (g) PE</b>	appr. 60 g
<b>Packaging notes</b>	printed user documentation is bleached in chlorine free process

**WARRANTY**

<b>Standard Warranty</b>	3 years
<b>Service level</b>	Bring-In / On-Site Service (depending on country)

**MAINTENANCE AND SUPPORT SERVICES - THE PERFECT EXTENSION**

<b>Recommended Service</b>	5x9, Response Time: Next Business Day
<b>Spare Parts availability</b>	5 years
<b>Service Weblink</b>	<a href="http://ts.fujitsu.com/Supportservice">http://ts.fujitsu.com/Supportservice</a>

**FUJITSU PLATFORM SOLUTIONS**

In addition to Fujitsu ESPRIMO E9900 0-Watt, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

**Dynamic Infrastructures**

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

**Computing Products**

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**MORE INFORMATION**

Learn more about Fujitsu ESPRIMO E9900 0-Watt, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
<http://ts.fujitsu.com/ESPRIMO>

**FUJITSU GREEN POLICY INNOVATION**

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>

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